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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,511	07/24/2003	Hiroshi Ueda	240697US2	9012

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ALEXANDRIA, VA 22314

EXAMINER
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NGUYEN, HOAN C

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

Application No.

10/625,511

Applicant(s)

UEDA ET AL.

Examiner

HOAN C. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 5-7 and 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 8 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/20/2005 has been entered.

Claim 9 is cancelled. Non-elected claims 1-3, 5-7, 10 and 12-15 are withdrawn. Therefore, claims 4, 8 and 11 are pending with elected species.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4, 8 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amended independent claim 4 recites the features “the signal input pad, the IC signal pad and the inspection pad are covered with a same sheet of anisotropic conductive film”, which is not disclose in all embodiments of the invention.

In the elected species (or nonelected species), Fig. 3 (or Figs. 1-2) shows that the in-input pads 11 and the inspection pad are covered with a same sheet of anisotropic conductive film 13; all IC-pads 4 and the signal input/output lines 5 are covered with a same sheet of anisotropic conductive film 17. There is nowhere in specification disclose three pads of the signal input, the IC signal and the inspection are covered with a same sheet of anisotropic conductive film:

[paragraph 11] ... The signal input pad and the inspection pad are covered with an anisotropic conductive film...

[paragraph13] ...The wiring substrate and the signal input pad on the insulating substrate are electrically connected by the anisotropic conductive film. The wiring substrate covers the signal input pad and the inspection pad with the anisotropic conductive film interposed therebetween. This configuration assures prevention of incoming static electricity and pad corrosion...

[paragraph 16]... The method further includes a step of simultaneously covering the inspection pad and the signal input pad with an anisotropic conductive film...

[paragraph 24]...The display apparatus also has IC power input pads 10, wiring substrate input pads 11, power source lines 9 connecting the IC power input pads 10 and the wiring substrate input pads 11, a shorting line 12, a wiring substrate 14, an anisotropic conductive film (ACF) 13 formed by resin for the wiring substrate driver IC 16, and an ACF 17 for the driver IC 16...

Therefore, the feature “the signal input pad, the IC signal pad and the inspection pad are covered with a same sheet of anisotropic conductive film” considers as NEW SUBJECT MATTER.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 4, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US5748179) in view of Sukegawa et al. (US5636329).

Ito et al. teach (Figs. 3 and 15) a display apparatus comprising:

Claim 4:

- an insulating substrate SUB1;
- a signal line (ITO conductive films d1-d3) for transmitting a signal to a pixel formed in a display area composed of pixels on the insulating substrate;
- a driver integrated circuit (IC) mounted outside of the display area of the insulating substrate and electrically connected to the signal line; and
- an inspection pad (test pad TEST) formed outside of the display area of the insulating substrate, electrically connected to the signal line, and covered with an anisotropic conductive film.
- a signal input pad formed outside of the display area of the insulating substrate, for inputting a signal from outside of the insulating substrate to the driver IC,
- an IC signal pad inherently formed at a position corresponding to the driver IC on the insulating substrate, and formed to connect the signal line and driver IC as Fig. 15 shown.

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wherein

- the signal input pad, the IC signal pad and the inspection pad are covered with a same sheet of anisotropic conductive film ACF as Fig. 15 shown. The same sheet of anisotropic conductive film ACF formed two slender AFC1 and AFC2, which cover all pads of the signal input, the IC signal and the inspection; where AFC1 and AFC2 are not continuous connecting.

Claim 8:

- a conductive extension line connecting the IC signal pad to the inspection pad as Fig. 3 shown.

Claim 11:

- the inspection pad and the signal input pad are substantially aligned along near an edge of the insulating substrate as Fig. 15 shown.

However, Ito does not disclose explicitly that an anisotropic conductive film made of resin.

Sukegawa et al. teach an anisotropic conductive film made of resin.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a display apparatus as Ito et al. disclosed with an anisotropic conductive film made of resin for fluidizing to cover in an intimate contact with the surface of the terminal portion, as taught by Sukegawa et al. (col. 5 lines 65-67).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (571) 272-2296. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim H. Robert can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HOAN C. NGUYEN  
Examiner  
Art Unit 2871

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ANDREW SCHECHTER  
PRIMARY EXAMINER